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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,199	02/05/2002	Leo Gagilardi	CM-2501	7093

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EXAMINER

KUMAR, PREETI

ART UNIT PAPER NUMBER

1751

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

10/068,199

Applicant(s)

GAGILARDI ET AL.

Examiner

Preeti Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Non-Final Rejection after RCE***

1. Claims 1-19 are pending. Claims 1, 16, 18, 19 are amended.
2. Claims 1 and 16 are independent.

***Priority***

3. Acknowledgment is not made of applicant's claim for foreign priority based on an application filed in the EPO on 2/5/2001 since applicant has not filed a certified copy of the EP 01870018.7 application as required by 35 U.S.C. 119(b).

***Response to Amendment***

4. The rejection of claims 1-19 under 35 U.S.C. 103(a) as obvious over Billman (US 5,534,167) in view of Grippaudo et al. (WO 00/26333) is maintained.

***Response to Arguments***

5. Applicant's arguments filed 4/5/2006 have been fully considered but are not found to be persuasive.

Specifically Applicants urge that the rejection of Billman in view of Grippaudo et al. is overcome by the amendment to the pH of the composition of claim 1.

Contrary to applicants arguments, Grippaudo et al. teach a process of cleaning with a composition comprising a peroxygen bleach having a pH ranging from 1-14 which range encompasses that taught by Billman. One of ordinary skill in the art would have been motivated to lower the pH of the carpet cleaner taught by Billman to a pH within the range taught by Grippaudo et al. and encompassed by the material limitations of the

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instant claims because Grippaudo et al. teach that the preferred pH ranges of 2 to 8 contribute to the stability of the composition. See page 9, 2nd paragraph. Accordingly the rejection has been maintained and is recapitulated below:

6. Claims 1-19 are rejected under 35 U.S.C. 103(a) as obvious over Billman (US 5,534,167) in view of Grippaudo et al. (WO 00/26333).

Billman teaches a carpet cleaning and oil and water repellency restoring composition comprising: (a) from about 0.50% to about 6.0% by weight of ethylene glycol n-hexyl ether; (b) from about 0.05% to about 1.0% by weight of a water-soluble or water miscible fluorinated hydrocarbon which forms a water and oil repellent surface upon drying; (c) from about 0.25% to about 5.0% by weight of a surfactant selected from the group consisting of anionic surfactants, nonionic surfactants and mixtures thereof; (d) from about 0.1% to about 7.0% by weight of a olefinic/acrylic polymer. See abstract. Billman teaches that the pH of the final composition is from about 6 to about 10. See col.7,ln.33.

Specifically regarding the fluorinated hydrocarbon, Billman teach the detergent-compatible, organic or water solubilizable fluorinated hydrocarbon compounds will contain about 10 to 60 weight percent, preferably about 15 to 45 weight percent, of carbon-bonded fluorine. If the fluorine content is less than about 10 weight percent, these compounds may no longer be detergent compatible, while compounds having fluorine contents greater than about 60 weight percent are uneconomical to use. Most preferably, the fluorinated hydrocarbon component is a 28% by weight mixture of C.sub.6 and C.sub.8 perfluoroalkyl derivative available from 3M under the trade

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designation L-12357. Typically, the fluorocarbon is present in an amount from about 0.05% to about 1.0% by weight. See col.7,ln.5-25.

Specifically regarding the peroxygen bleach, Billman teaches that the cleaning compositions also include peracids and peroxides to assist in the overall cleaning performance of the compositions. Suitable peroxides include hydrogen peroxide, T-butyl hydroperoxide, peracetic acid, acid and percarbonates. Preferably, the peroxide is hydrogen peroxide. The peroxide or peracid is typically present in an amount from about 0.0% to about 8.0%. See col.7,ln.39-50.

Specifically regarding the surfactant, Billman teaches various surfactants for use in the composition including alkali metal or ammonium salts of fatty acids, alcohol sulfates, alcohol sulfonates, alcohol phosphates, alcohol phosphonates, alkyl sulphonates, alkyl sulphonates; disodium lauric sulfosuccinate, disodium lauramido MEA sulfosuccinate and mixtures thereof. The preferred anionic surfactant is ammonium or sodium lauryl sulfate. See col.5, ln.50-60.

However, Billman does not teach the claimed pH of the composition withing th process of claim 1. Also, Billman does not teach applying 10ml to 150 ml onto 50% of the carpet using an electrically operated spraying device as recited by claim 1. Billman does not teach using a vacuum cleaner to remove some of the composition as recited by claim 2. Also, Billman does not specifically teach a radical scavenger as recited by instant claims 15-16.

Grippaudo et al. teach a process of cleaning carpet with a vacuum cleaner comprising peroxygen, and and an N-vinyl polymer, said process comprising the steps

of applying said composition to the surface of the carpet with a manual or electrical sprayer and leaving said composition to dry onto the carpet. The said process further comprises the step of removing said composition with a vacuum. See page 8, 4<sup>th</sup> paragraph.

Grippaudo et al. teach that the amount of the composition applied for the cleaning of carpets will depend on the severity of the stain or soil. In the case of stubborn stains more than one application may be required to ensure complete removal of the stain. The area to be cleaned by applying the compositions according to the present invention may be of any size. Indeed, a complete section or more preferably the whole carpet may be sprayed with the composition for the cleaning of carpets. See page 7, 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs.

Grippaudo et al. teach a process of cleaning with a composition comprising a peroxygen bleach having a pH ranging from 1-14 which range encompasses that taught by Billman. See page 9 2<sup>nd</sup> paragraph.

Grippaudo et al. teach various suitable radical scavengers to further contribute to the stability of the peroxygen containing composition. See page 33 last paragraph – page 34 2<sup>nd</sup> paragraph.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to arrive at a process of cleaning a carpet with a composition having a pH of 0 and 3 as recited by instant claims with a reasonable expectation of success, because the teachings of Billman in view Grippaudo et al. suggest a process for cleaning carpet with a composition having a pH of between pH 2 and 8, preferably

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pH 1-14. One of ordinary skill in the art would have been motivated to lower the pH of the carpet cleaner taught by Billman to a pH within the range taught by Grippaudo et al. and encompassed by the material limitations of the instant claims because Grippaudo et al. teach that the preferred pH ranges of 2 to 8 contribute to the stability of the carpet cleaning composition.

Also, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to formulate a carpet cleaning composition comprising a radical scavenger and applying 10ml to 150 ml onto 50% of the carpet using an electrically operated spraying device and use a vacuum cleaner to remove some of the composition as recited by instant claims with a reasonable expectation of success, because the teachings of Billman in view Grippaudo et al. suggest a liquid carpet cleaning composition applied using an electrically operated spraying device comprising a radical scavenger wherein the amount of the composition sprayed onto the carpet is varied dependent on the amount of treatment.

Furthermore, one of ordinary skill in the art would have been motivated to combine the teachings of Billman with that of Grippaudo et al. because both teach a process of cleaning carpet with carpet cleaning compositions in general.

7. Upon further consideration of Applicants claims, new ground(s) of rejection is made below.

### ***New Grounds of Rejections***

***Claim Objections***

8. Claim 19 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 19 is a process claim dependent on a composition claim 16. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1-19 are rejected under 35 U.S.C. 103(a) as obvious over Scialla et al. (US 5,905,065) in view of Kortmann et al. (US 4,781,844).

Scialla et al. teach a carpet cleaning composition comprising a halide (abstract and col.6,ln.48) and sulfosuccinate surfactants (col.11, ln.25-30) and wherein there is an effective amount of bleach that is present as a source of active oxygen which is hydrogen peroxide or source thereof, and wherein the pH of said liquid composition is between 1 and 6, preferably between 2 to 6 (col.10,ln40-46 and claim 1).

Scialla et al. teach that the liquid aqueous compositions may be applied directly onto the area to be treated or applied using a cloth or piece of material such as spraying device or aerosol can, a sponge, a brush or other mechanical/electrical device. Also the liquid aqueous composition is applied to the area to be treated by using a spraying device or an aerosol can. Such a spraying device may be trigger operated or pump operated or electrically operated or operated by any source of pressurized gas such as



a can or a pressurizer. Such spraying devices are particularly preferable if a large area is to be treated as it facilitates the ease of use for the consumer. The spraying devices ensure uniform coverage of the area to be treated and maximises the advantage of the using liquid aqueous compositions containing peroxides. This is because the application of product by spray best allows the product to be left to dry on the area treated, even without rubbing or brushing. This optimizes the action time of the composition and allows the best exploitation of the bleaching action of peroxides. Scialla et al. teach that the liquid aqueous composition is left to dry until said composition which combined with dirt has been changed into dry residues. These residues are then removed from the carpet mechanically with a vacuum cleaner. See col.13,ln.15-45 and col.12, ln.55.

Regarding the radical scavenger, Scialla et al teach that pyrocatechol improves the chemical stability of the liquid compositions of the present invention that further comprise a source of active oxygen, i.e. lower the decomposition of the bleach and the bleach activator if present. Indeed, it is believed that the chemical stabilising effect of pyrocatechol is twofold. Firstly they may work as radical scavengers and secondly they may interact with the hydrogen peroxide preventing or limiting hydrolysis, therefore reducing the rate of peroxide decomposition. See col.11,ln.10-20.

Scialla et al. do not specifically teach a fluorinated compound as recited by instant claims 1 and 16 and do not specifically teach applying the liquid cleaning composition in an amount of from 10mL to 150 mL per m<sup>3</sup> onto at least 50% of a carpet area as recited by the instant claim 1.

Kortmann et al. teach a textile finishing agent comprising a perfluoroalkyl polymer. Kortmann et al. teach that the fluorine content of the textile finishing agent is 0.2 to 40% by weight. See abstract and col.5,ln.15-40. Kortmann et al. teach that the composition is applied to carpet textile via a one material spraying unit. See example 1.

It would have been obvious, to one of ordinary skill in the art, to modify the halide polymer of Scialla et al. with the perfluoroalkyl polymer of Kortmann et al., with a reasonable expectation of success, and similar results because Kortmann et al. teach that the aqueous dispersions of the fluorocarbon resins can, in addition, contain polymers or polycondensates which augment the film-forming or water-repellent properties of the perfluoro resin.

One of ordinary skill in the art would have been motivated to combine the teachings of Scialla et al. with that of Kortmann et al. because both teach the analogous art of treating carpet and furthermore, Scialla et al. suggest halide polymers in general.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Mc Ginty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Preeti Kumar *P.K.*  
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